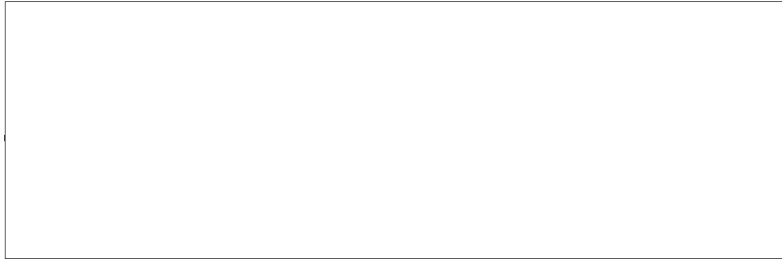


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LHG 144
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20 August 1958



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Attention: Mr. 

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Enclosure: (A) Progress Reports for the
Month of July 1958, in quintuplicate

Gentlemen:

As required, Enclosure (A), described above, is submitted detailing the progress achieved during the month of July 1958. The submission of the reports was delayed due to plant shutdown during the last week of July and the first week of August.

Very truly yours,

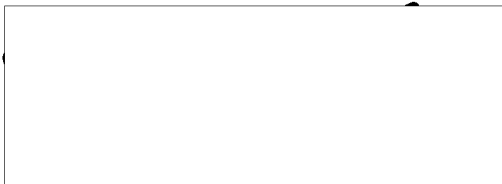


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Contract Administrator
GWB:NKG:js

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July 58

INFLATABLE ANTENNAS

Purpose: The purpose of the project is to design, develop, and test one Antenna System in the 350-10,000 mc range. Also, five complete antenna systems with indoor mounts and two interchangeable outdoor mounts are to be fabricated.

Personnel: Electrical Engineer:

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Mechanical Engineer:

Status: A good technique has been established for measuring the phase center of logarithmically periodic structures. Preliminary results indicate that the ratio of the distance from the apex of the logarithmically periodic structure d to the wavelength λ is relatively constant ($d/\lambda \approx \text{constant}$) and that the distance from the apex to the phase center can be controlled to a limited extent by varying the parameters of the structure. If it is possible to locate the phase center at the apex of the structure, a dish feed can be designed to have a bandwidth as wide as that of the basic logarithmically period structure.

Future Plans: During the next month work will begin on the dish design and additional work will be done on controlling the position of the phase center of the logarithmically periodic structure.

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